p1028b: Combine Like Terms (v10)

Example

Combine like terms.

$$2 - x + x + 3x - 3x^2 - 2x^2 - 4 + 5 - 7x^2 + 4$$

Answer

Combine the quadratic terms.

$$-3x^2 - 2x^2 - 7x^2 \equiv -12x^2$$

Combine the linear terms.

$$-x + x + 3x \equiv 3x$$

Combine the constant terms.

$$2 - 4 + 5 + 4 \equiv 7$$

The final result:

$$-12x^2 + 3x + 7$$

Question 1

Combine like terms.

$$9 + 4x + x - 5x^2 + 7x^2 - 9 - 3x + 5 - 8x^2 - x$$

Question 2

Combine like terms.

$$1 + 5x + 4 - 9x^2 - x + 8x^2 - 2x^2 - 5x + 9 + 7x^2$$

Question 3

Combine like terms.

$$x^2 + 9x^2 + 8 - 3x + 7x^2 - 5x - 7 + 4x + 2 + 6x^2$$

Question 4

Combine like terms.

$$6x^2 + 4 + x + 7 + 5 + 3x - 8x^2 - x^2 - 6x + 9x^2$$